

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11, 13 and 16-27 of copending Application No. 10/518542. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scopes of the conflicting claims both encompass a 5 layer tubular film comprised of 4 layers of polyolefin or modified polyolefin with an outer layer of polyamide. The specific polyolefins and polyamides recited in both applications are the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 recites the broad recitation 30- 100  $\mu\text{m}$ , and the claim also recites 40-90  $\mu\text{m}$  which is the narrower statement of the range/limitation. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grund U.S. Patent No. 5,612,104 (hereafter referred to as Grund).

6. Grund teaches a five-layer film comprising a 1<sup>st</sup> and 5<sup>th</sup> layer of polyamide, a 3<sup>rd</sup> core layer of polyolefin and a 2<sup>nd</sup> and 4<sup>th</sup> adhesive layer between the polyolefin core layer and the polyamide layers. Useful polyamides for the 1<sup>st</sup> and 5<sup>th</sup> layer are recited to be at least one aliphatic polyamide and/or at least one aliphatic copolyamide and/or at least one partially aromatic polyamide and/or at least one partially aromatic copolyamide. (Col. 5, lines 3-5) Specifically, the homopolyamides and/or copolyamides are recited to be produced from monomers selected from the group of caprolactam, laurilactam (Col. 5, line 32),  $\omega$ -aminoundecanoic acid (Col. 5, lines 29-30), adipic acid, azelaic acid, sebacic acid, decanedicarboxylic acid, dodecanedicarboxylic acid (Col. 5, lines 27-29), terephthalic acid, isophthalic acid (Col. 5 line 67-Col. 6 line 1), tetramethylenediamine, pentamethylenediamine, hexamethylenediamine, octamethylenediamine (Col. 5, lines 23-25), and xylylenediamine (Col. 5, line 53). The thickness of the inner polyamide layer is recited to be from 1-8  $\mu$ m and the outer polyamide layer thickness from 10-40  $\mu$ m. (Col. 4, lines 50 and 67) Suitable polymers

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for the polyolefin core layer are recited to be homopolymers of ethylene or propylene or copolymers of linear  $\alpha$ -olefins having 2 to 8 C-atoms, or mixtures of these homopolymers or copolymers with one another. Particularly suitable are polyolefins having melting points of above 120° C., e.g., LLDPE, HDPE, polypropylene homopolymers, as well as polypropylene block copolymers and polypropylene random-copolymers. (Col. 6, lines 12-19) The thickness of the polyolefin core layer is recited to be from 10-30  $\mu\text{m}$ . (Col. 6, line 20) Suitable polyolefins for 2<sup>nd</sup> and 4<sup>th</sup> adhesive layers are recited to be modified homo- or copolymers of ethylene and/or propylene, and optionally of further linear  $\alpha$ -olefins with 3 to 8 C-atoms having grafted thereon monomers of the group consisting of  $\alpha,\beta$ -unsaturated dicarboxylic acids, such as maleic acid, fumaric acid, itaconic acid or their acid anhydrides, acid esters, acid amides or acid imides. Additionally suitable are copolymers of ethylene or propylene and optionally of further linear  $\alpha$ -olefins with 3 to 8 C-atoms having  $\alpha,\beta$ -unsaturated carboxylic acids, such as acrylic acid, methacrylic acid and/or their metallic salts and/or their alkyl esters, or adequate graft polymers of the mentioned monomers on polyolefins. The thickness of the 2<sup>nd</sup> and 4<sup>th</sup> polyolefin adhesive layers is recited to be between 4-8  $\mu\text{m}$ . (Col. 6, line 30) The film of the invention is prepared by coextrusion and subsequent biaxial stretching and thermosetting. (Col. 6, lines 55-56) Depending on the temperatures during thermosetting, a shrinkable or non-shrinkable film may be manufactured. (Col. 7, lines 17-19) The thickness of the film of the invention is recited to be from 30-90  $\mu\text{m}$ . (Claim 22) The film of the invention is recited to be useful for packaging sausage.

7. Grund does recite a polyolefin film for the inner layer of the tubular film.

8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced the interior 1<sup>st</sup> polyamide layer of Grund with a layer of polyolefin selected from the compositions recited to comprise the 2<sup>nd</sup> and 4<sup>th</sup> adhesive layers. Polyolefin layers are well known for their heat sealing properties in the packaging art (see for example US 5021510 or US 5759648) and replacing the polyamide layer with a polyolefin layer would have been advantageous since a polyolefin layer would be cheaper and not require a metal clamp or clip for sealing.
9. The limitations recited in claims 1-21 are obvious variations/improvements to the invention recited by Grund. The use of a metallocene catalyst to produce the polyethylene disposed in the inner layer as recited in claim 4 would have also been obvious to one of ordinary skill in the art at the time the invention was made since metallocene catalyzed polyethylenes exhibit lower melting temperatures than Zeigler-Natta catalyzed polymers. This property is advantageous for heat sealing applications.
10. The limitations of melting point, density and melt flow index recited in claim 6 are not specifically enumerated by Grund but are properties that would have been obvious to optimize to one of ordinary skill in the art at the time the invention was made.
11. The methods of packaging meat products recited in claims 16 and 18 would have been obvious to one having ordinary skill in the art at the time the invention was made who desired to package meat. It would have also been obvious to one of ordinary skill in the art at the time the invention was made to have produced a bag, food wrap or food package as recited in claims 17 and 20-21 since the tubular film of the invention is specifically recited to be useful for packaging.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Jacobson whose telephone number is (571) 272-8905. The examiner can normally be reached on Monday-Friday 7:30 AM-5 PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 4174

Michele L. Jacobson  
Examiner  
Art Unit 4174

/M. J./